

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Heaths Creek

Water Body Segment at a Glance:

County: Pettis
Nearby Village: Longwood

Length of impaired

segment: 13 miles

Pollutant: Low Dissolved Oxygen

Source: Unknown Water Body ID: 0848



Scheduled for TMDL development: 2016

Description of the Problem

Beneficial uses of Heaths Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation

Use that is impaired

Protection of Warm Water Aquatic Life

Standards that apply

In the Missouri Water Quality Standards, found in 10 CSR 20-7.031 Table A, the criterion for dissolved oxygen, or DO, in streams is a minimum of 5 mg/L (milligrams per liter or parts per million).

Background information and Water Quality Data

Heaths Creek is located in the northeast corner of Pettis County. It flows east into the Lamine River. The Oct. 30, 2009 revision of Missouri's water quality standards lists the length for this creek as 21 miles, rather than the 13 miles shown in the 2008 303(d) list. This difference is based on improved resolution and measuring tools. The original end points for the water body have not changed. The impairment is based on continuous dissolved oxygen data measured by MEC Water Resources at three locations in the creek. These data were collected for durations of 1-3 months in both 2006 and 2007.

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These data indicate water quality conditions in Heaths Creek are not protective of aquatic life. Dissolved oxygen is important, as many aquatic organisms require high levels of oxygen to survive. For dissolved oxygen, if more that 10 percent of measurements in a water body fail to meet the water quality criterion that water body is judged to be impaired. In the case of Heaths Creek, 47.2 percent of the dissolved oxygen data did not meet the water quality criterion. It is not known what is causing the dissolved oxygen to be low.

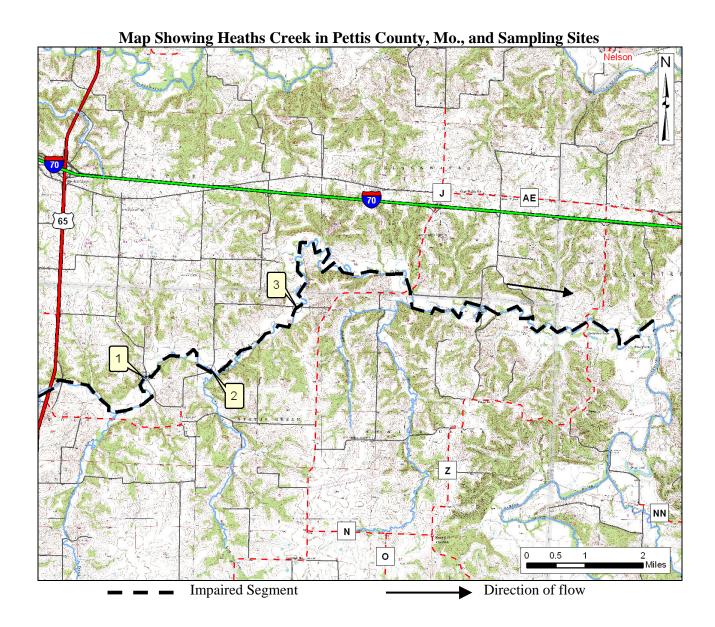
Dissolved Oxygen Data for Heaths Creek

| Site | | | No. | No. <5 | Percent |
|------|-----------|-----------|---------|--------|---------|
| # | From | То | Samples | mg/L | <5 |
| 1 | 7/12/2006 | 9/14/2006 | 5,746 | 3,389 | 59.0 |
| 2 | 7/12/2006 | 9/14/2006 | 6,120 | 3,677 | 60.1 |
| 3 | 8/7/2006 | 9/13/2006 | 5,674 | 2,460 | 43.4 |
| 1 | 7/18/2007 | 9/5/2007 | 4,674 | 1,194 | 25.5 |
| 2 | 7/18/2007 | 11/9/2007 | 9,948 | 6,094 | 61.2 |
| 3 | 7/19/2007 | 9/5/2007 | 4,608 | 553 | 12.0 |
| | | | 36,770 | 17,367 | 47.2* |

^{*}Frequency of exceedance greater than 10 percent is considered an impaired condition.

There is a map of Heaths Creek on the next page showing the impaired segment and the sampling sites.

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Sample Sites

- 1 Heaths Creek at Wanamaker Road
- 2 Heaths Creek at Major Road
- 3 Heaths Creek at Walk Road

For more information call or write:

Missouri Department of Natural Resources Water Protection Program P.O. Box 176, Jefferson City, MO 65102-0176 1-800-361-4827 or 573-751-1300 office 573-522-9920 fax

Program Home Page: www.dnr.mo.gov/env/wpp/index.html

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